ABSTRACT

A flow control baffle is suspended from a pivot shaft across a drain passage to restrict passage of waste material; the shaft is connected to a torque limiter which prevents rotation until a selected load is applied to the baffle upstream face; the torque limiter has a number of detent balls that are forced into detents by a series of springs acting thru a spring seat; increased flow increases torque on the baffle with the increasing torque transmitted through the baffle shaft and to the torque limiter. When the liquid reaches a preset level, the balls are forced out of the detents against the force of the springs and the baffle is free to rotate and float on the liquid surface. As the liquid level recedes, the baffle will return to its original vertical position, the balls will re-engage in the detents and lock the baffle in its original position and ready for the next cycle.